



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.               | CONFIRMATION NO. |
|---|-------------|----------------------|-----------------------------------|------------------|
| 10/576,306  | 04/19/2006  | Tomoyuki Kanno       | KAW-347-PCT                       | 4487             |
| 28892   | 7590        | 05/03/2007           |                                   |                  |
| SNIDER & ASSOCIATES<br>P. O. BOX 27613<br>WASHINGTON, DC 20038-7613 |             |                      | EXAMINER<br>BAISA, JOSELITO SASIS |                  |
|   |             |                      | ART UNIT                          | PAPER NUMBER     |
|   |             |                      | 2832                              |                  |
|   |             |                      | MAIL DATE                         | DELIVERY MODE    |
|   |             |                      | 05/03/2007                        | PAPER            |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/576,306

**Applicant(s)**

KANNO, TOMOYUKI

**Examiner**

Joselito Baisa

**Art Unit**

2832

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 4/19/2006.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mac George [2568587] in view of Murai [6154113] and Schmidt [6598824].

Mac George discloses a bobbin 10 in which frames of a primary-side winding 22, 25 and a secondary-side winding 23, 26 are provided on both sides of a frame of a magnetic-coupling adjusting winding (24, 27) in order to make the frames (12, 13) of the primary-side winding, the secondary-side winding in the same magnetic path,

wherein a part of one of the primary-side winding and the secondary-side winding is wound around the frame of the magnetic-coupling adjusting winding (24, 27) [Col. 4, Lines 11-50, Figure 1].

Mac George disclose the instant claimed invention discussed above except for the frames of the primary-side winding, the secondary-side winding sandwiching the frame of the magnetic-coupling adjusting winding, in order to make the frames of the primary-side winding, the secondary-side winding and the magnetic-coupling adjusting winding located in the same magnetic path,

wherein a first flange part is provided between the frame of the primary-side winding and the frame of the magnetic-coupling adjusting winding, and a second flange part is provided between the frame of the secondary-side winding and the frame of the magnetic-coupling adjusting winding, and

a notch part which is formed in the first flange part or the second flange part located on the lower surface side of the bobbin.

Art Unit: 2832

Murai disclose frames of two windings 4 sandwiching the frame of the a winding 2, in order to make the frames of the windings 2 and 4 located in the same magnetic path,

wherein a first flange part 9 is provided between the frame of the winding 4 and the frame of the winding 2, and a second flange part 9 is provided between the frame of the winding 4 and the frame of the winding 4.

It would have been obvious to one having ordinary skill in the art at the time of the invention to use a bobbin that has two coil frames sandwiching another coil frame as taught by Murai to the structure of Mac George.

The motivation would have been to provide a compact transformer for a discharge lamp [Col. 3, Lines 67 and Col. 4, Lines 1-5].

Schmidt discloses a notch part 58, 56 formed in the first flange part or the second flange part located on the lower surface side of the bobbin (13a, 13b, 15a, 15b).

It would have been obvious to one having ordinary skill in the art at the time of the invention to use a bobbin with a notch as taught by Schmidt to the structure of Mac George in view of Murai.

The motivation would have been to allow routing of the coil wire to another side of the flange [Col. 4, Lines 15-18, Figure 1].

Regarding claim 4, Mac George discloses a part of the primary-side winding (22, 25) is wound around the frame of the magnetic-coupling adjusting winding to largely adjust the leakage inductance [Col. 4, Lines 34-50].

Art Unit: 2832

Regarding claim 5, mac George discloses a part of the secondary-side winding (23, 26) is wound around the frame of the magnetic-coupling adjusting winding to finely adjust the leakage inductance [Col. 4, Lines 34-50].

Regarding claim 6, Murai discloses a pin-shaped terminals 2a for substrate connection are provided for the bobbin (3, 5), pin-shaped terminals extend in one direction substantially orthogonal to a direction in which the frames of the primary-side winding, the magnetic-coupling adjusting winding, and the secondary-side winding are arranged [see Figure 1].

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joselito Baisa whose telephone number is (571) 272-7132. The examiner can normally be reached on M-F 5:30 am to 2:00 pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on (571) 272-1990. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2832

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Joselito Baisa  
Examiner  
Art Unit 2832

jsb

  
ELVIN ENAD  
SUPERVISORY PATENT EXAMINER  
04/30/17